

POLARIZATION OF LYMAN- β RADIATION FROM ATOMIC HYDROGEN EXCITED BY ELECTRON IMPACT FROM NEAR-THRESHOLD TO 1000 eV

G. K. James ^{1*}, D. Dziczek ², J. A. Slevin ^{1,3} and Igor Bray ⁴

¹ Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA 91109

² Institute of Physics, Nicholas Copernicus University, Torun, Poland

³ present address: 56 Waterloo Road, Dublin 4, Ireland

⁴ Physics and Energy Studies, Murdoch University, Perth, Western Australia 6150

The polarization of Lyman- β radiation, produced by electron impact excitation of atomic hydrogen, has been measured for the first time over the extended energy range from near-threshold to 1000 eV. Measurements were obtained in a crossed-beams experiment using a silica-reflection linear polarization analyzer in tandem with a vacuum ultraviolet (VUV) monochromator to isolate the emitted line radiation. Our data are in excellent agreement with convergent close coupling (CCC) calculations over the entire energy range. The data are broadly similar to the earlier measurements of H Lyman- α polarization reported from this laboratory.

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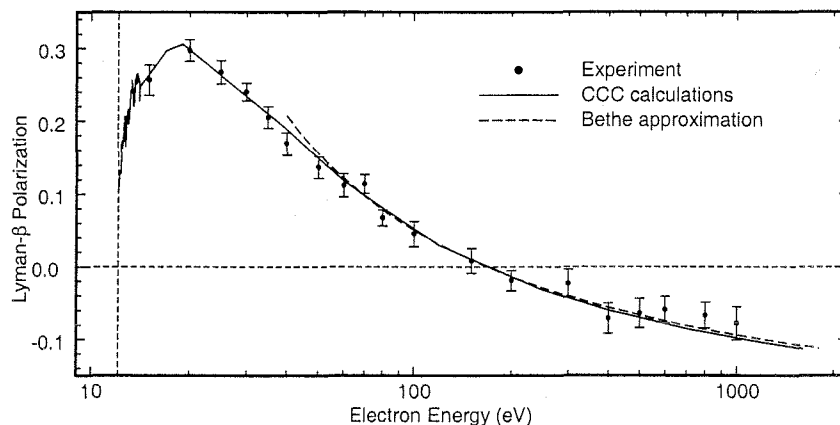


Figure 1. Polarization of Lyman- β radiation from atomic hydrogen excited by electron impact from near-threshold to 1000 eV.

* Geoffrey.K.James@jpl.nasa.gov